HAND-HELD LASER DISTANCE METERS

NEW!

Cat. No. HL3

With a range of 325' this "utility tough" basic, laser distance meter offers the following features:

- *ACCURACY .12"*
- *RANGE: 325'*
- *SCREEN ILLUMINATION*
- *BUILT IN BUBBLE LEVEL*
- *MEASURES AREA & VOLUME*
- *MINIMUM AND MAXIMUM SETTINGS*
- *CONTINUOUS MEASURING*
- *ADDITION AND SUBTRACTION*
- *RECALL OF LAST 19 MEASUREMENTS*
- *SPRAY AND DUST PROOF CASE*

Cat. No. HL5

With a range of 650', this "utility tough" laser distance meter offers many additional features than the HL3 including **a built in telescopic viewfinder** for use in bright light and long distances.

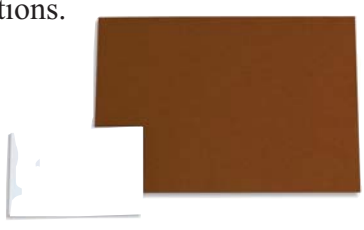
- *ROOM CALCULATION*
- *TIME DELAY RELEASE*
- *TRIPD MOUNTABLE*
- *INDIRECT DISTANCE MEASUREMENTS*
- *1 STORED CONSTANT VALUE*
- *RECALL OF LAST 20 MEASUREMENTS*
- *MULTIFUNCTIONAL END PIECE*
- *TELESCOPIC VIEWFINDER*

Cat. No. HLTP

Tripod; recommended for long distances and Visual Screen applications.

Cat. No. HL810P

Target Plates; aids long distance applications.



Cat. No. HL8

This is our most *advanced model*. The built-in **Tilt Sensor** combined with **Visual Zoom Screen Targeting** allows for more, user friendly, sophisticated measurements making this the **most versatile hand-held laser measuring meter on the market.**

All features of the HL3 and HL5 are included along with:

- *RECALL OF LAST 30 MEASUREMENTS*
- *TILT SENSOR*
- *VISUAL ZOOM SCREEN TARGETING*

WHEN OUTDOOR AREAS ARE TOO BRIGHT OR DISTANCES TOO FAR, USE THE VISUAL ZOOM SCREEN TARGETING FUNCTION TO MAKE ALL MEASUREMENTS VISUALLY IN PLACE OF THE LASER POINT. JUST ALIGN TARGET WITH THE SCREEN CROSS HAIRS AND "SHOOT". THEN REPEAT THE PROCESS ON ADDITIONAL TARGETS AS NEEDED.

*See **page 209** for more info*

VISUAL ZOOM SCREEN TARGETING

LASER RANGE FINDER

Cat. No. LT200

Quickly capture data for tower heights, span distances, right-of-way limits and vegetation clearances from a safe and convenient distance.

The built-in tilt sensor allows you to capture horizontal, vertical and slope distance data with 1-foot accuracy. *Range 3,000'*

GROUND RESISTANCE TESTER

TEST GROUNDS OF:

- ***UTILITY POLES***
- ***ANTENNAS***
- ***TELEPHONE***
- ***CABLE TV***
- ***PORTABLE GENERATORS***
- ***DISTRIBUTION TRANSFORMERS***
- ***SERVICE ENTRANCES***

The Megger Direct-Reading Ground Tester features three-terminal operation for fall-of-potential earth resistance measurements or it can be used for two-terminal tests to a ground reference. Range changing, multipliers or calibrating adjustments are not necessary.

Specifications
Range: .5 to 500 ohms
Accuracy: +/-2% of full scale deflection to 100 Ohms @15 to 35°C and Probe Resistance up to 5000 Ohms each probe
Stray earth Current Effect: DC-No effect. AC-No effect up to 2V

Cat. No.	Description
250260	Megger Direct-Reading Earth Tester
250560	Accessory Kit (Consists of: Test Lead Set, One Each 10'-30'-50' Leads, 2-12" Ground Rods, Plug-in Calibration Standard)
217719	Hard Vinyl Case; Holds Meter & Acces.

DIGITAL GROUND RESISTANCE TESTER KIT

Cat. No. 4630K

- Measures soil resistivity (4-Point)
- Measures ground resistance (2- and 3-Point) Fall-of- Potential method
- Step voltage tests and touch potential measurements
- Auto-Ranging
- Designed to reject high levels of noise and interference
- AC powered with rechargeable NiMH batteries

CLAMP-ON GROUND RESISTANCE TESTER

Cat. No. 3731

- Simple and fast clamp-on operation no leads, no auxiliary rods or spacing requirements
- Direct reading of ground resistance from 0.1ž to 1200ž
- Direct reading of continuity and ground loop resistance
- Direct reading of ground leakage or phase current from 1mA to 30Arms
- Jaw design with large 1.25" window accommodates up to 1000MCM cables
- Memory and alarm functions

Includes calibration loop, battery and user manual in hard carrying case.

PERSONAL MULTIGAS MONITOR

Cat. No. PM1

This portable, rechargeable, multigas monitor is able to detect and display up to four gases simultaneously. These include oxygen, flammable gases, carbon monoxide and hydrogen sulfide gases. High specification sensors are continually checked using a patented Reflex technology to ensure that safe, accurate and reliable measurements are always made. The pre-calibrated, disposable sensor cartridge can be replaced in under one minute thereby simplifying maintenance, reducing downtime and minimizing total sensor cost.

This compact and rugged detector is designed for all environments. Unit is fully configurable to your unique requirements. An optional, internal pump activates on demand by simply attaching the sampling hose. Ultra-bright alarm lights and a powerful audible alarm coupled with a periodic green flash and watchdog beep provide user confidence that monitor is always in operation and alarms are never missed. In addition, a large, multi-lingual, backlit display guided by a user friendly menu system is used.

Unit is ready to use “out of the box”.

If you can’t find it...
call HI-LINE!

HAND-CRANKED MEGOHMMETER

Cat. No. 1250N

- True Megohmmeter®
- Test voltages of 250V, 500V and 1000V
- Insulation measurements to 200M and 5000M ohm
- LED indicates constant voltage output and proper cranked speed
- Extra rugged cast aluminum case; O-ring sealed against rain, water and dust with aluminum lid

5000V DIGITAL/ANALOG MEGOHMMETER

Cat. No. 5060

- True Megohmmeter®
- Test voltage combination of 500V, 1000V, 2500V and 5000V
- Insulation measurements from 1k ohm to 10T ohm
- Adjustable and programmable test voltage (50 to 5000V)
- Automatic calculation of DAR, PI and DD ratios, Capacitance and Leakage Current
- Display resistance, test voltage and run time
- Programmable test run times and PI ratio times
- Automatic test inhibition if live sample (>25)
- Automatic discharge and display of discharge voltage

DIGITAL TRANSFORMER RATIOMETER

Cat. No. DTR-8500 (110V)

- Designed for Power Transformers, VTs, PTs and CTs
- Direct readings from 0.8000:1 to 1500.0:1
- Display Turns Ratio, Polarity and Excitation Current simultaneously
- Dual power supply and operation: integrated rechargeable NiCD battery and AC supply
- Display warnings of incorrect lead connections, reverse polarity, open and short circuits
- Easy connection and test setup: no calibration or balancing required
- Large dual line display with adjustable contrast and backlight ensures clear day/night visibility
- Low battery indicator

DIGITAL 10A MICRO-OHMMETER

Cat. No. 5600

- Four-terminal Kelvin resistance measurement
- 10A test current
- 0.25% basic accuracy
- Direct reading, easy to operate
- Six selectable ranges
- Reverse polarity switch
- Overload and input fuse protection
- Automatic decimal point and zero
- Rechargeable NiCD battery (110V/220V)
- Rugged field case for industrial applications

FALL-OF-POTENTIAL GROUND RESISTANCE TESTER KIT

Cat. No. 3640K

- Large LCD digital display
- Designed to reject high levels of noise & interference
- Auto-Ranging
- Battery powered
- Performs Fall-of-Potential method
- Measure ground resistance (2- and 3-Point)

Includes meter, one 16 ft lead, two 150 ft leads on spools with wind-up handles, two auxiliary ground electrodes, soft carrying case, batteries and user manual.

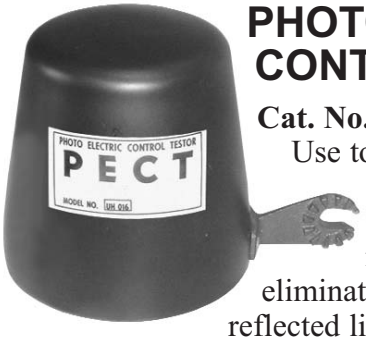
CLAMP-ON MULTIMETER

Cat. No. CM-850

This meter, with it's digital LED display, reads1-600AC Volts, 0.1-600 Amps, 0-2k Ohms. Meter measures true RMS for accuracy when harmonics are present.

Jaw opening: 1.38"

PHOTO ELECTRIC CONTROL TESTER



Cat. No. UH-016

Use to test photo electric switches and lamps. Creates "instant midnight" by completely eliminating all direct and reflected light. Designed for use on twist lock type controls up to 4" diameter.

Used with extending hot sticks for testing controls and lamps from the ground. Also adaptable to all hot sticks equipped with universal type heads and can be used with shorter length sticks to allow safe checking from aerial buckets.

If you can't find it...

call HI-LINE!

THREE-PHASE POWER QUALITY ANALYZER POWERPAD™

- True RMS single-, two- and three-phase measurements at 256 samples/cycle, plus DC
- Real-time color waveforms
- Automatic current probe recognition and scaling
- True RMS voltage and current measurement
- Display and capture voltage, current and power harmonics to the 50th order including direction in real time
- Phasor diagram display
- VA, VAR and W per phase and total
- KVAh, VARh and kWh
- Neutral current display
- Transformer K-factor display
- Power Factor, displacement PF display
- Captures up to 50 transients
- Short-term flicker display
- Phase unbalance (current and voltage)
- Harmonic Distortion (total and individual)

Cat. No. 3945 w/MN93 (240A)
Cat. No. 3945-24AF
w/24" AmpFlex™193-24 (6500A)
Cat. No. 3945-36AF
w/36" AmpFlex™193-36 (6500A)

All models include three color-coded current probes (MN93 example shown), four color-coded 10 ft voltage leads, four color-coded alligator clips, RS-232 DB9F optically coupled serial cable, NiMH battery, US 120V power cord, DataView® Professional software, carrying bag, soft carrying pouch and user manual.

VOLTAGE TESTER

Cat. No. 14460
Voltage Scales:
AC - 120v, 240v, 480v, 600v
DC - 120v, 240v, 600v
Storage Case - Cat. No. 14480

0-2KV GENERAL PURPOSE DIGITAL VOLTMETER

Cat. No. RCDC1000U-B

This ruggedly built, general purpose, 0 to 2kV DC digital voltmeter that can be used in a variety of applications, including a wide range of commercial and industrial categories.

This *direct contact* meter is designed to confirm the status of electrical systems. The meter can be used with higher currents than hand-held models and for general outdoor use. Both the meter probe and secondary probe have threaded end fittings.

A 30-foot interconnecting cable is included along with three adapters:

- Hook Adapter,
- Straight Adapter
- Magnetic Track Adapter.
- LCD display has a **backlight** for easy reading.

NON-CONTACT, A/V HIGH VOLTAGE DETECTOR

- BUILT IN SELF-TEST
- AUDIBLE AND VISUAL INDICTORS

4744K DETECTOR KIT W/ 4315 CASE & SHOT GUN ADAPTER

Self-Testing Voltage Detectors allow testing to be continuous and automatic. An intermittent flash and beep confirms the detector is functioning properly.

These testers may be used with rubber insulating gloves or hot sticks. Testers indicate voltage with an extra bright LED light and audible signal.

Cat. No.	Settings phase to phase
4544	Off/240V/4.2kV/15k/25kV/35kV/69kV/115kV/230kV
4644	Off/240V/4.2kV/35kV/69kV/115kV/230kV/345kV500kV
4744	**Off/Test-240V/Battery/URD:15kV/25kV35kV Overhead: 4.2kV/15kV/25kV/35kV/46kV/69kV**
4315	Molded Case
Add suffix "K" for KIT which includes Case and Universal Adapter	

Cat. No. 21600
Replacement handle
Cat. No. 20872
Replacement battery strap

UNIVERSAL ADAPTER

Cat. No. M1867
Universal adapter for shotguns

AUTO-RANGING VOLTAGE INDICATOR FOR 600V TO 69KV

THIS "SMART" INSTRUMENT MAKES OVERHEAD AND UNDERGROUND HOT-LINE TESTING EASIER THAN EVER!

Features:

- ***VISUAL & AUDIBLE INDICATORS***
- ***READING "HOLD"***
- ***CONFIRMING SELF TEST***
- ***LOW BATTERY INDICATOR W/ SLEEP MODE***

The "ARVI's" state-of-the-art electronics eliminates the need for a voltage selector switch. A bright red light and audible tone indicate the phase-to-phase voltage class automatically! The meter begins detecting at 480 Volts and displays and holds one of these voltage classes: 600V, 4kV, 15kV, 35kV or 69kV.

Cat. No.	Description
C403-3374	Auto-Ranging Voltage Indicator
Unit includes hard shell padded case, shepherd hook probe & instructions	
T403-0857	Bushing Adapter for 15, 25, 35kV *(f/ undrgd apl)*
T403-0856	Elbow Adapter for 15, 25, 35kV *(f/ undrgd apl)*
C403-3409	Voltage Indicator Tester *(to test meter)*
T403-3418	Kit Includes all above

AUTO-RANGING VOLTAGE INDICATOR FOR 69KV TO 500KV

Cat. No. C403-3375

This automatic ranging state of the art meter functions quickly displays the approximate line-to-line voltage class. it provides an easy, reliable means for the operator to determine if a line is:

1- DE-ENERGIZED

2- CARRYING LESS THAN NORMAL SYSTEM VOLTAGE FROM ANY SOURCE OR INDUCED CHARGE FROM AN ADJACENT LIVE CIRCUIT

3- ENERGIZED AT FULL SYSTEM VOLTAGE

An audible signal begins as a slow beeping that becomes faster as the final reading is displayed. When not in use, the unit's energy-saving sleep mode automatically conserves the battery.

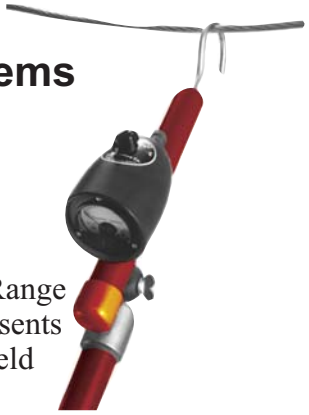
Includes the tester, shepherd hook probe, instruction manual and hard shell padded case.

If you can't find it...

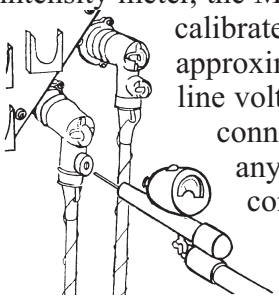
call HI-LINE!

MULTI-RANGE VOLTAGE DETECTORS

For Overhead Systems to 600kv and URD Elbow Test Points*



To confirm that a line is de-energized prior to performing maintenance on it, the Multi-Range Voltage Detector (MRVD) presents field practicality. Actually a field intensity meter, the MRVD is calibrated to read approximate line-to-line voltage when connected to any phase conductor.



Cat. No.	Description	Scales	Wgt
C403-0979*	Overhead and URD	1-40kV	5.5 lbs
C403-1029	Overhead Model	16-161kV	
C403-1140	Overhead Model	69-600 kV	

All include plastic case
**Includes straight probe and "TP" setting on selector switch for URD elbow testing.*

"LAST CHECK" TRANSFORMER TESTER

Cat. No. 6793

This easy to use, hand held, lightweight tester provides a safe and reliable method of verifying that distribution transformers, up to 3300 KVA, do not have shorted or open windings prior to energizing. Detect failures in transformers before loading and transporting to the job site. *Eliminate blowing cutout fuses to determine condition of the transformer.* This tester reduces potential hazards of oil spills and costly clean up caused by energizing shorted transformers.

TESTER ACCESSORIES

T403-0428

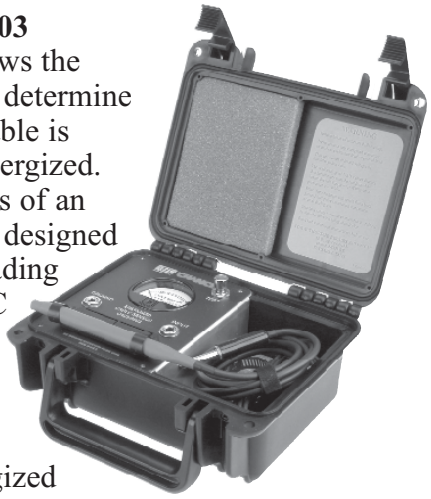
T403-0857

T403-0856

Cat. No.	Description
T403-0602	Elbow Adapter for 8.3kV and 15kV only
T403-0428	Bushing Adapter for 8.3kV and 15kV only
T403-0856	Elbow Adapter for 15, 25, and 35kV
T403-0857	Bushing Adapter for 15, 25, and 35kV
H1876-6P	Pigtail Hook Probe
H1876-6S	Shepherd Hook Probe
P403-2422P	Straight Probe

ENERGIZED CABLE SENSOR

Cat. No. C403-0803



This sensor allows the lineman to readily determine whether a URD cable is energized or de-energized. The sensor consists of an amplifier which is designed to give a meter reading when the small AC voltage between the semi-conductive sheath and the concentric neutral of an energized URD cable is applied to the test probe.

Sensor may be used to check for energized condition on concentric neutral cable below an elbow without test points. It can also be used at cable mid-span. Hose clamps bridge all strands of the concentric neutral at the test location. Sensor's neutral lead clips to one of the hose clamps. Tip on probe lead contacts only the semi-conductive cable sheath to test for voltage presence. A self-test contact point is incorporated to that battery condition can be verified prior to use. *Includes: Molded case, test leads hose clamps, batteries and instructions.*

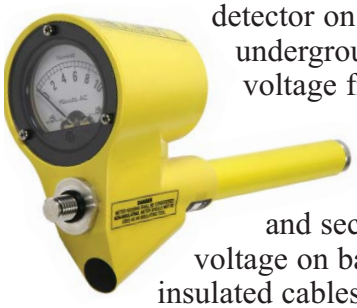
WIDE RANGE VOLTAGE DETECTORS & VOLTMETERS

These VOLTAGE DETECTORS & VOLTMETERS consist of one high resistance unit connected in series with an ammeter calibrated to read approximate voltage. Voltage detectors create an incomplete electrical circuit because the single probe physically makes contact with one conductor potential and the live line tool attachment floating at a variable potential.

COMBINATION PROXIMITY & DIRECT CONTACT ANALOG VOLTAGE DETECTOR

Cat. No. VDA040PU ***Dual application design!***

This "utility tough" highly accurate detector is a **combination proximity/direct contact** voltage detector on overhead and underground systems. It can detect voltage from the ground on bare overhead lines when hand held. It can also test capacitive test points and secondary voltage on bare or insulated cables. The detector indicates line-to-ground values for nominal or induced voltages. *Storage case included.*



The 5-position selector switch is calibrated for height above ground to compensate for a capacitive coupling effect.

- URD - Detects voltage on underground systems
- OH - Detects overhead voltage 0kV - 10kV
- X4 - Detects overhead voltage 11kV - 40kV
- T - Tests and verifies meter function
- P - Indicates voltage in proximity to line, it also indicates voltage in direct contact on capacitive test points and secondary voltages

For your safety, the detectors include overload protection up to 66.5kV (115kV phase-to-phase) and are completely shielded to minimize stray field interference.

Optional adapters are available for underground use up to 35kV.

**Add a suffix "S" to include Bushing Adapters*

Cat. No. VDAL40PU

Same as above with back light.

Cat. No. VDA040CU

Same as VDA040PU above but without proximity function.

ANALOG VOLTAGE DETECTOR

These detectors offer the widest and highest voltage range available in a single voltage detector. They are designed for use on overhead and underground systems and have a passive meter reading function.

The easy-to-read analog scale is a dual linear/logarithmic scale for better resolution on distribution systems. These detectors indicate approximate nominal or induced voltage in line-to-ground values. The easy-to-use detector requires **no voltage scale selector switch or multipliers**. It is water resistant and has a strong construction designed to withstand wear. *Includes carrying case with interior cushioning.* Hold and backlight functions are standard on VDAH300 and VDAH450 models only.

Wide Range Analog Voltage Detectors

VDA0300/VDAH300 - .4kV - 300kV line-ground (4kV - 500kV phase-phase)

VDA0450/VDAH450 - .4kV - 450kV line-ground (4kV - 765kV phase-phase)

Optional adapters are available for underground use up to 35kV.

Cat. No.	Description	Wgt
VDA0300U	2.4Kv-300Kv Voltage Detector	8 lbs.
VDAH300U	2.4Kv-300Kv w "Hold" & Backlight	8 lbs.
VDA450U	2.4Kv-450Kv Voltage Detector	8 lbs.
VDAH450U	2.4Kv-450Kv w/ "Hold" & Backlight	8 lbs.
Add a suffix "S" to include 2 bushing adapters		

PHASING VOLTMETERS & TESTERS

PHASING VOLTMETERS consist of two high resistance units physically connected in series with an ammeter, calibrated to read voltage. The electrical circuit is completed by physically making contact between Phase-to-Phase or Phase-to-Ground.

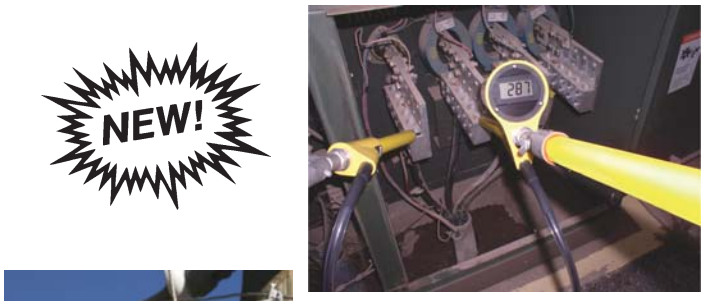
MULTI-PURPOSE "DIGITAL" PHASING METER

The **All-in-one** PD Series All-Purpose Utility Meters are phasing voltmeters designed to replace numerous other meters that feature a single range and/or perform a single function.

Use as:
- 600V Voltmeter
- Capacitive Test Point Phasing Meter
- Regulator Neutral Detector
- Commercial/Industrial Meter
- Conventional Phasing Voltmeter

These digital, *"utility tough"* All-Purpose Utility Phasing Voltmeter are designed for measuring voltage and phasing on overhead and underground systems, capacitive test points and 3-phase secondaries. They have three ranges for use on system voltages, ranging from 120V to 46kV, phase-to-phase. Each model consists of a large (3/4") LCD digital meter with backlight, a 5-position selector switch, and an interconnect cable and a second probe to complete the circuit.

Completely shielded, these voltmeters only read contacted test points, with no stray field indications. Unique input circuitry measures and reconciles the undesirable charging currents associated with other phasing meters, providing the most accurate (+/- 1%) phasing voltmeter available.



Cat. No.	Description	Wgt
PD25U	Digital Phasing Volt Meter 0-25kV	
PD50U	Digital Phasing Volt Meter 0-250kV	
*Add a suffix "S" to include Bushing Adapters		

PD25US SHOWN

*Includes **hard, padded case** and 3kV power supply.*

"CORDLESS" MULTI-PURPOSE PHASING TESTER

CORDLESS!
70 FEET RANGE

Cat. No. PD800WU

This **Cordless** Phasing Tester *()* accurately and easily operates in multiple applications including:

- *CORDLESS PHASING; 208V - 800KV*
- *VOLTAGE DETECTION; 4KV - 69KV*
- *PHASE SEQUENCING*
- *PHASE ANGLE INDICATION*

You will only need this one kit for three-phase secondary systems, capacitive test points, URD systems and overhead and transmission systems!

This unique tester operates like a conventional phasing tester, but does not require an interconnecting cable or extension resistors.

Each kit contains a Reference Probe (Transmitter) and a Meter Probe (Receiver) & universal attachment. Probes are "utility tough" and are completely shielded to minimize stray field interference. *Includes padded case.*

Both the Reference Probe and the Meter Probe have a five-position selector switch that controls different operating modes.

- **Off** - *Power off for storage*
- **Deg** - *For measurements of the phase angle between the two probes, 208V - 800kV*
- **URD** - *For phasing and voltage detection on Underground Rural Distribution systems from 4kV - 35kV*
- **OH** - *For phasing and voltage detection on overhead systems 4kV - 69kV*
- **Test** - *Tests basic meter function and displays the condition of the battery*

The Meter Probe features a large digital display with backlight and easy-to-read, high intensity color-coded indicator lights. Readings are displayed in voltage (kV) or degrees. The Reference Probe features a single high intensity indicator light for high visibility.

RANGE EXTENDER ADAPTER

Cat. No. PD800RE

The Range Extender is designed to operate with the PD800W Cordless Phasing Tester to extend the phasing range. The extender can be used for system phase labeling, identifying/tagging URD systems and traditional phasing at distances unsuitable for normal phasing meters.

The unit consists of a reference repeater and meter repeater and operates reliably at distances up to 1 mile. When used with the range extender, the PD800W is functional for all voltage ranges listed for the "DEG" position for the display of degree displacement only. Wgt. 8 lbs.

"TESTING HAS NEVER BEEN EASIER THAN WITH THIS EXCLUSIVE, WIRELESS TECHNOLOGY."

"THE MOST ACCURATE, EASY-TO-USE AND VERSATILE TESTER AVAILABLE TODAY!"

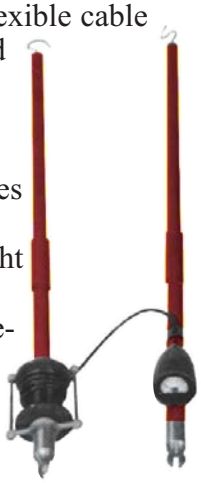
If you can't find it...

call HI-LINE!

PHASING TESTERS for Distribution Circuits

This single range tester easily determines phase relationships and approximate voltage, line-to-line or line-to-ground.

Each tester consists of two fiberglass poles with end fittings threaded for interchangeable probes. The probe fittings couple with a high-impedance component encased in each probe. To complete the test circuit, a 22' length of insulated flexible cable stores on a reel affixed to one pole and connects to the voltmeter on the other pole.



Simple to operate, the tester poles first attach to Epoxiglas Universal Poles of proper length for the voltage being worked. Then the probes can be brought into contact with the conductors appropriate for the meter to read phase-to-phase or phase-to-ground voltage.

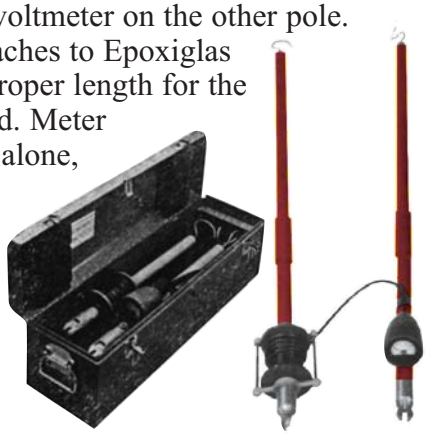
Extension Resistors can be used to extend any 16kV Phasing Tester for 48kV or 80kV application.

Cat. No.	Description
H1876	16kV Tester Kit*
H1876-1	16kV Tester, Hook Probes, Case, and Manual
T403-2261	25kV Tester Kit*
H1876-7	40kV Tester, Hook Probes, Case, and Manual
H1876-4	Pr. 25" Extension Resistors for up to 48kV
H1876-2	Pr. 43" Extension Resistors for up to 80kV
P624-2	Bag for 48kV resistors
P624-4	Bag for 80kV resistors

*Kits include two (H1760-1) 1-1/4"x 6' Epoxiglas universal poles (not shown), storage bag, tester, hook probes, case, & instructions

PHASE ROTATION TESTER

To determine the correct phase-rotation relationship, this portable instrument features construction similar to Phasing Tester H1876-1. An additional grounding circuit on the Phase Rotation Tester sets it apart for the specific purpose named. The tester consists of two fiberglass poles with end fittings threaded for interchangeable probes. The probe fittings couple with a high-impedance component encased in each pole. A 22' length of insulated cable stores on a reel affixed to one pole and connects to the voltmeter on the other pole.



The basic tool attaches to Epoxiglas Universal Poles of proper length for the voltage being worked. Meter displays up to 16kV alone, or can read circuits through 69kV with the head-on Extension Resistors as pictured to the right.

Cat. No.	Description
H1879	Phase Rotation Tester, 16kV, with Plastic Case
H1876-4	Pr. 25" Extension Resistors for up to 48kV
H1876-2	Pr. 43" Extension resistors for up to 80kV
P624-2	Bag for 48kV resistors
P624-4	Bag for 80kV resistors

DC HI-POT URD TEST ADAPTER

For quick, reliable fault detection on underground cables, two units are available for phase-to-phase system voltages up to 16kV and 35kV. For use with H1876-1 Phasing Tester and Elbow or Bushing Adapters.

- ***TEST NEW CABLE BEFORE INITIAL ENERGIZING***
- ***TEST REPAIRED CABLE BEFORE RE-ENERGIZING***
- ***TEST SUSPECT CABLE SPAN FOR FAULTS***

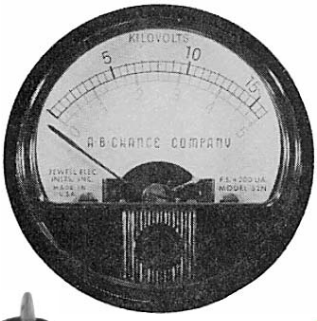
Cat. No.	Description
C403-1762	16kV Hi-Pot Adapter*
C403-1763	35kV Hi-Pot Adapter*

*Maximum phase-to-phase system voltage

COMPLETE DISTRIBUTION PHASING TESTER KIT
for Overhead and Underground Systems
Dual Range: 5kV & 16kV Scales

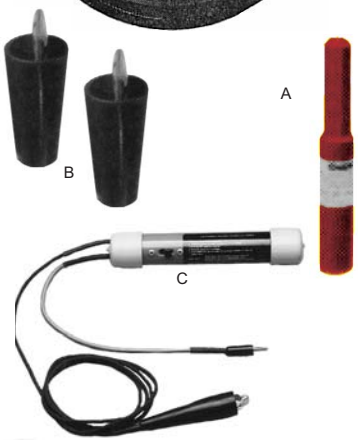
Cat. No. T403-2557

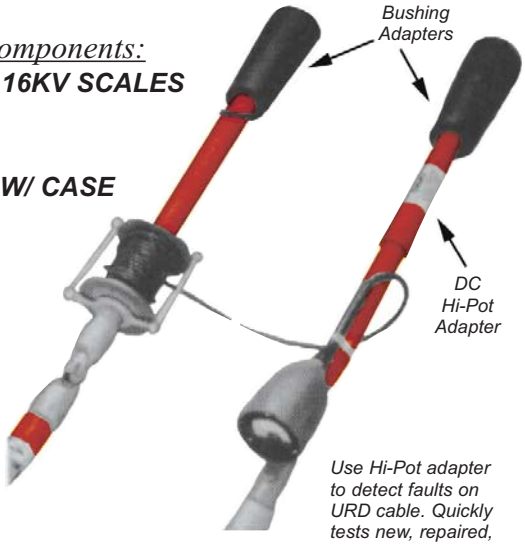
This kit is designed to allow the user to identify phases, read line-to-line or line-to-ground voltage, and detect URD cable-faults. Most of the individual components which make up this kit can be found on the preceding pages.



Complete kit consists of the following components:

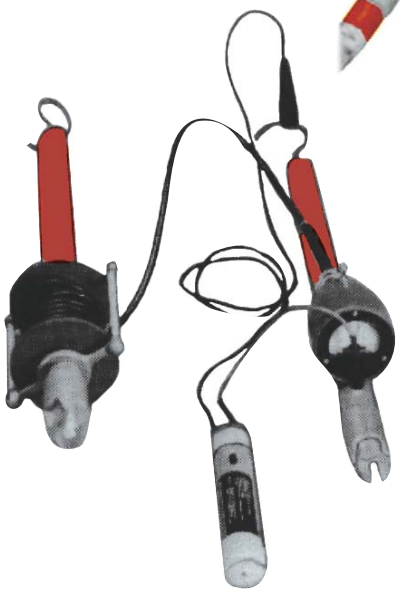
- ***DUAL RANGE TESTER WITH 5KV & 16KV SCALES***
- ***SHEPHERD HOOK PROBE***
- ***PIGTAIL HOOK PROBE***
- ***TWO 1.25" X 6' EPOXIGLAS POLES W/ CASE***
- ***16KV HIGH-POT ADAPTER***
- ***TWO URD BUSHING ADAPTERS***
- ***PHASING VOLTMETER TESTER***
- ***PADDED PLASTIC STORAGE CASE***
- ***INSTRUCTION MANUALS***





Use Hi-Pot adapter to detect faults on URD cable. Quickly tests new, repaired, or suspect spans.

	Cat. No.	Description
A	C403-1762	16kV Hi-Pot Adapter
B	T403-0857	URD Bushing Adapter (2 needed)
C	C403-0838	Phasing Voltmeter Tester



Phasing Voltmeter Tester shown with leads attached to test points on meter. Read out is displayed on meter dial for easy field testing prior to use.

TESTER FOR PHASING METERS

Cat. No. C403-0838

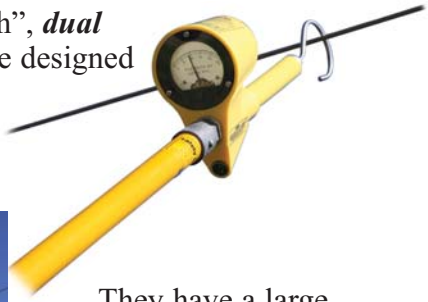
The phasing voltmeter tester allows line personnel to determine, in the field, the operating condition of the Phase Testers shown on the previous page.

The tester uses each instrument's own meter to display its operating condition. The tester plugs into the jack on the instrument and meter readings are noted when the tester's clip is contacted to each of the instrument's terminals. Leads and battery included.

If you can't find it...
call HI-LINE!

DUAL PURPOSE, ANALOG PHASING VOLTMETER & VOLTAGE DETECTOR

These "utility tough", ***dual application*** meters are designed to be used as either a Voltage Detector or a Phasing Voltmeter.



They have a large, easy-to-read analog meter, a 5-position selector switch, 3kV self-test device, interconnect cable and a second probe to complete the circuit. Each probe is completely shielded to minimize stray field indications.

The 5-position switch control consists of:

- C - Indicates voltage on capacitive test points
- CP - Phases using capacitive test points
- L - Detects overhead and underground voltage
- LP - Phasing on overhead lines
- BT - Battery Test

Adapters are available for underground use up to 35kV. *Padded case included.*

Cat. No. 81280U - (300V - 25kV)

Cat. No. 83280U - (300V - 35kV)

*Add a suffix "S" to include Bushing Adapters for underground and overhead use.

If you can't find it...

call HI-LINE!

ROTATION TYPE PHASE SEQUENCE INDICATORS

Cat. No. 44030

This rugged and reliable instrument has a 25 - 60 frequency range and a voltage range of 60V - 600V. ***Carrying Case:*** **Cat. No. 44040**

PHASE ROTATION TESTER

Cat. No. PMR-1

Three functions in one unit: Phase Rotation, Motor Rotation, and Open Phase Indication. Unit incorporates fused phase rotation inputs. Battery operated (motor rotation).

PERSONAL MULTIGAS MONITOR

Cat. No. PM1

This portable, rechargeable, multigas monitor is able to detect and display up to four gases simultaneously. These include oxygen, flammable gases, carbon monoxide and hydrogen sulfide gases. High specification sensors are continually checked using a patented Reflex technology to ensure that safe, accurate and reliable measurements are always made. The pre-calibrated, disposable sensor cartridge can be replaced in under one minute thereby simplifying maintenance, reducing downtime and minimizing total sensor cost.

This compact and rugged detector is designed for all environments. Unit is fully configurable to your unique requirements. An optional, internal pump activates on demand by simply attaching the sampling hose. Ultra-bright alarm lights and a powerful audible alarm coupled with a periodic green flash and watchdog beep provide user confidence that monitor is always in operation and alarms are never missed. In addition, a large, multi-lingual, backlit display guided by a user friendly menu system is used. Unit is ready to use "out of the box".

CABLE, PIPE, FAULT, LOCATORS

Please call for information on specific needs.

WIRE LENGTH METER

Cat. No. WL140

This meter quickly measures reels of both stranded and solid, 24AWG to 1000MCM wire and cable up to lengths of 20,000'.

The operator selects the modes; Gauge, Aught or MCM. Then selects either Copper or Aluminum mode, attaches the alligator clips to both ends of the cable being measured and presses the "LENGTH" button to display the digital reading.

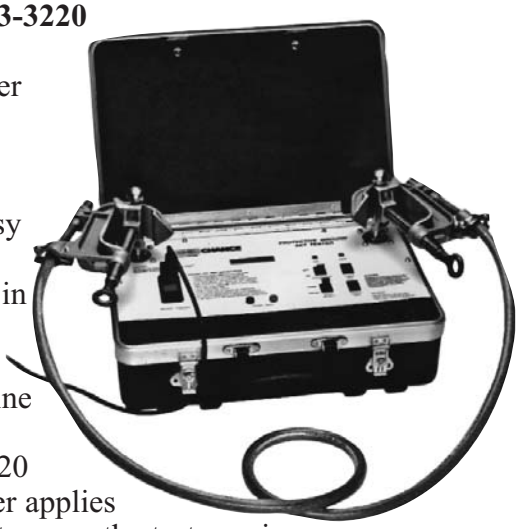
Insulation piercing probes are included enabling use without stripping insulation.

- ACCURACY OF +/- 1%
- AUTO AMBIENT TEMPERATURE ADJUSTMENT

Includes:
Alligator clip assemblies, insulation piercing assemblies, probe leads, batteries and impact resistant carrying case.

GROUND SET TESTER

Cat. No. C403-3220



This self contained tester uses micro-processor technology to provide an easy way to check the resistance in protective grounding sets used by line personnel. Powered by 120 VAC, the tester applies Direct Current across the test specimen.

From pushing a single button, the digital display shows the resistance measured in milliohms compared with a preset threshold for the size grounding cable selected. A green "pass" or red "fail" light also indicates the test result's relation to the adjustable threshold. An optional **Elbow Adapter *C403-3449*** for testing temporary grounding sets fitted with an orange-jacketed elbow is available. A **Straight Stud Terminal *T403-3159*** is also available for testing grounded-parking-stand temporary grounding sets.